

Released January 24, 2022, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA).

December Milk Production down slightly

Milk production in the 24 major States during December totaled 18.0 billion pounds, down slightly from December 2020. November revised production, at 17.2 billion pounds, was down 0.2 percent from November 2020. The November revision represented a decrease of 16 million pounds or 0.1 percent from last month's preliminary production estimate.

Production per cow in the 24 major States averaged 2,027 pounds for December, 8 pounds above December 2020.

The number of milk cows on farms in the 24 major States was 8.88 million head, 42,000 head less than December 2020, and 8,000 head less than November 2021.

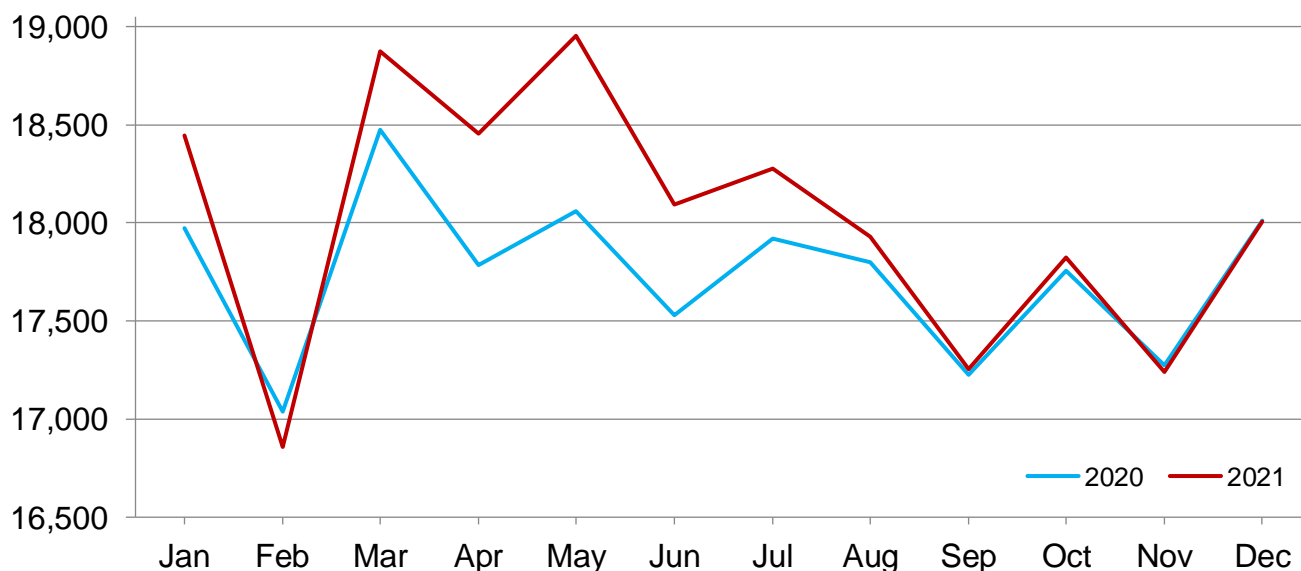
October-December Milk Production down 0.1 Percent

Milk production in the United States during the October - December quarter totaled 55.5 billion pounds, down 0.1 percent from the October - December quarter of the prior year.

The average number of milk cows in the United States during the quarter was 9.38 million head, 67,000 head less than the July - September quarter, and 46,000 head less than the same period last year.

Monthly Milk Production - 24 Selected States

Million pounds



Milk Cows and Production by Quarter – United States: 2020-2021

[May not add due to rounding]

Quarter	Milk cows ¹		Milk per cow ²		Milk production ²		
	2020	2021	2020	2021	2020	2021	Change from 2020
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January-March	9,378	9,458	5,990	6,003	56,174	56,776	1.1
April-June	9,364	9,502	5,988	6,119	56,070	58,141	3.7
July-September	9,380	9,450	5,908	5,913	55,419	55,875	0.8
October-December	9,429	9,383	5,892	5,913	55,557	55,484	-0.1
Annual	9,388	9,448	23,777	23,950	223,220	226,276	1.4

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Milk Cows and Production by Month – 24 Selected States: 2020-2021

[May not add due to rounding]

Month	Milk cows ¹		Milk per cow ²		Milk production ²		
	2020	2021	2020	2021	2020	2021	Change from 2020
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January	8,837	8,934	2,034	2,065	17,974	18,446	2.6
February	8,848	8,947	1,926	1,884	17,038	16,858	-1.1
March	8,861	8,961	2,085	2,106	18,474	18,873	2.2
April	8,855	8,985	2,009	2,054	17,787	18,454	3.7
May	8,838	8,996	2,044	2,107	18,061	18,953	4.9
June	8,834	8,993	1,984	2,012	17,530	18,091	3.2
July	8,854	8,989	2,024	2,033	17,919	18,275	2.0
August	8,857	8,947	2,010	2,004	17,799	17,927	0.7
September	8,877	8,916	1,941	1,935	17,226	17,255	0.2
October	8,897	8,898	1,996	2,003	17,758	17,821	0.4
November	8,914	8,889	1,938	1,939	17,274	17,239	-0.2
December	8,923	8,881	2,019	2,027	18,012	18,006	-
Annual	8,866	8,945	24,008	24,170	212,852	216,198	1.6

- Represents zero.

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Estimated Milk Cows and Production by Month – United States: 2020-2021

[May not add due to rounding]

Month	Milk cows ¹		Milk per cow ²		Milk production ²		
	2020	2021	2020	2021	2020	2021	Change from 2020
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January	9,365	9,445	2,016	2,047	18,877	19,330	2.4
February	9,377	9,458	1,908	1,868	17,895	17,666	-1.3
March	9,391	9,472	2,066	2,088	19,402	19,780	1.9
April	9,377	9,496	1,993	2,036	18,684	19,332	3.5
May	9,360	9,507	2,027	2,088	18,972	19,855	4.7
June	9,355	9,503	1,968	1,995	18,414	18,954	2.9
July	9,372	9,491	2,001	2,013	18,756	19,102	1.8
August	9,374	9,446	1,988	1,984	18,632	18,738	0.6
September	9,395	9,413	1,919	1,916	18,031	18,035	-
October	9,414	9,393	1,976	1,984	18,603	18,635	0.2
November	9,432	9,382	1,919	1,921	18,103	18,024	-0.4
December	9,442	9,375	1,997	2,008	18,851	18,825	-0.1
Annual	9,388	9,448	23,777	23,950	223,220	226,276	1.4

- Represents zero.

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Milk Cows and Production – 24 Selected States: December 2020 and 2021

[May not add due to rounding]

State	Milk cows ¹		Milk per cow ²		Milk production ²		
	2020	2021	2020	2021	2020	2021	Change from 2020
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona	196	194	2,125	2,100	417	407	-2.4
California	1,720	1,719	2,000	2,045	3,440	3,515	2.2
Colorado	201	202	2,205	2,200	443	444	0.2
Florida	111	105	1,730	1,730	192	182	-5.2
Georgia	81	83	1,900	1,900	154	158	2.6
Idaho	646	652	2,055	2,070	1,328	1,350	1.7
Illinois	84	81	1,845	1,820	155	147	-5.2
Indiana	191	186	1,990	1,980	380	368	-3.2
Iowa	220	225	2,095	2,090	461	470	2.0
Kansas	173	168	2,005	2,010	347	338	-2.6
Michigan	439	434	2,270	2,270	997	985	-1.2
Minnesota	455	460	1,915	1,925	871	886	1.7
New Mexico	337	292	2,100	2,060	708	602	-15.0
New York	626	620	2,070	2,055	1,296	1,274	-1.7
Ohio	258	248	1,860	1,860	480	461	-4.0
Oregon	125	125	1,725	1,735	216	217	0.5
Pennsylvania	478	470	1,790	1,775	856	834	-2.6
South Dakota	141	170	1,950	1,940	275	330	20.0
Texas	613	625	2,120	2,150	1,300	1,344	3.4
Utah	95	94	1,940	1,935	184	182	-1.1
Vermont	120	120	1,810	1,785	217	214	-1.4
Virginia	74	71	1,725	1,770	128	126	-1.6
Washington	279	261	2,005	1,985	559	518	-7.3
Wisconsin	1,260	1,276	2,070	2,080	2,608	2,654	1.8
24-State Total	8,923	8,881	2,019	2,027	18,012	18,006	-

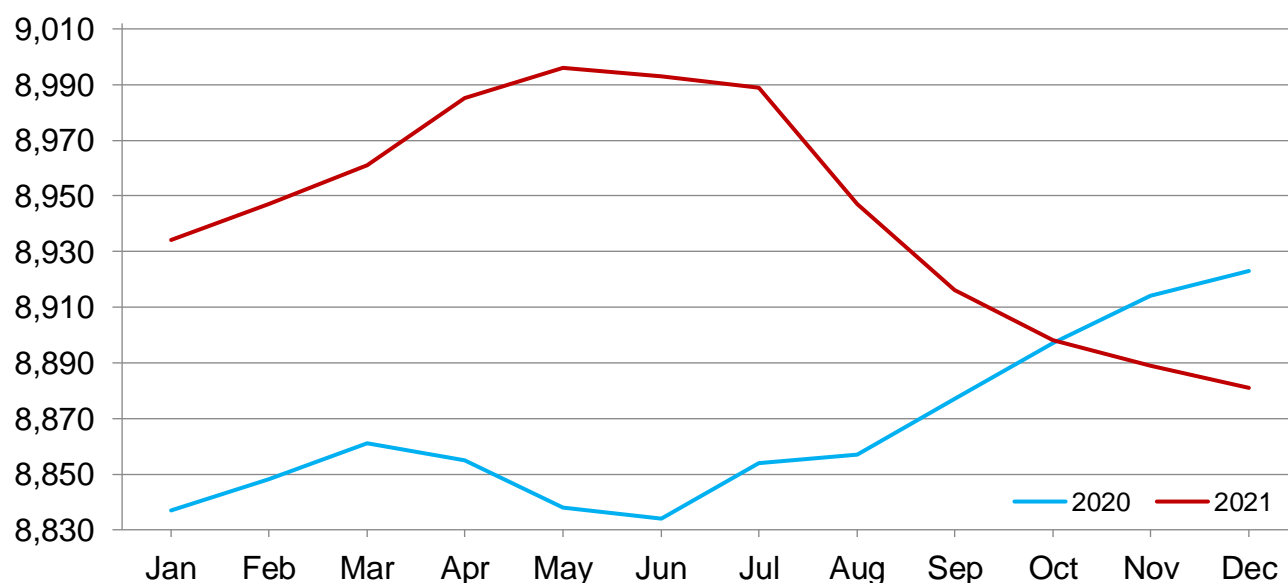
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¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Monthly Milk Cows - 24 Selected States

Thousand head



Milk Production (January 2022)

USDA, National Agricultural Statistics Service

Milk Cows and Production – 24 Selected States: November 2020 and 2021

[May not add due to rounding]

	Milk cows ¹		Milk per cow ²		Milk production ²		Change from 2020
	2020	2021	2020	2021	2020	2021	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona	198	194	1,975	1,960	391	380	-2.8
California	1,720	1,719	1,940	1,955	3,337	3,361	0.7
Colorado	201	201	2,110	2,110	424	424	-
Florida	111	105	1,570	1,590	174	167	-4.0
Georgia	81	82	1,755	1,770	142	145	2.1
Idaho	646	651	2,005	2,010	1,295	1,309	1.1
Illinois	84	81	1,730	1,730	145	140	-3.4
Indiana	191	186	1,875	1,890	358	352	-1.7
Iowa	219	225	2,005	1,990	439	448	2.1
Kansas	172	168	1,960	1,940	337	326	-3.3
Michigan	436	434	2,180	2,170	950	942	-0.8
Minnesota	455	461	1,835	1,835	835	846	1.3
New Mexico	334	295	1,995	1,960	666	578	-13.2
New York	626	625	1,985	1,980	1,243	1,238	-0.4
Ohio	257	250	1,780	1,770	457	443	-3.1
Oregon	125	125	1,670	1,680	209	210	0.5
Pennsylvania	482	472	1,720	1,695	829	800	-3.5
South Dakota	140	166	1,880	1,890	263	314	19.4
Texas	608	625	2,030	2,030	1,234	1,269	2.8
Utah	95	94	1,880	1,865	179	175	-2.2
Vermont	120	120	1,725	1,700	207	204	-1.4
Virginia	74	71	1,630	1,645	121	117	-3.3
Washington	279	262	1,930	1,920	538	503	-6.5
Wisconsin	1,260	1,277	1,985	1,995	2,501	2,548	1.9
24-State Total	8,914	8,889	1,938	1,939	17,274	17,239	-0.2

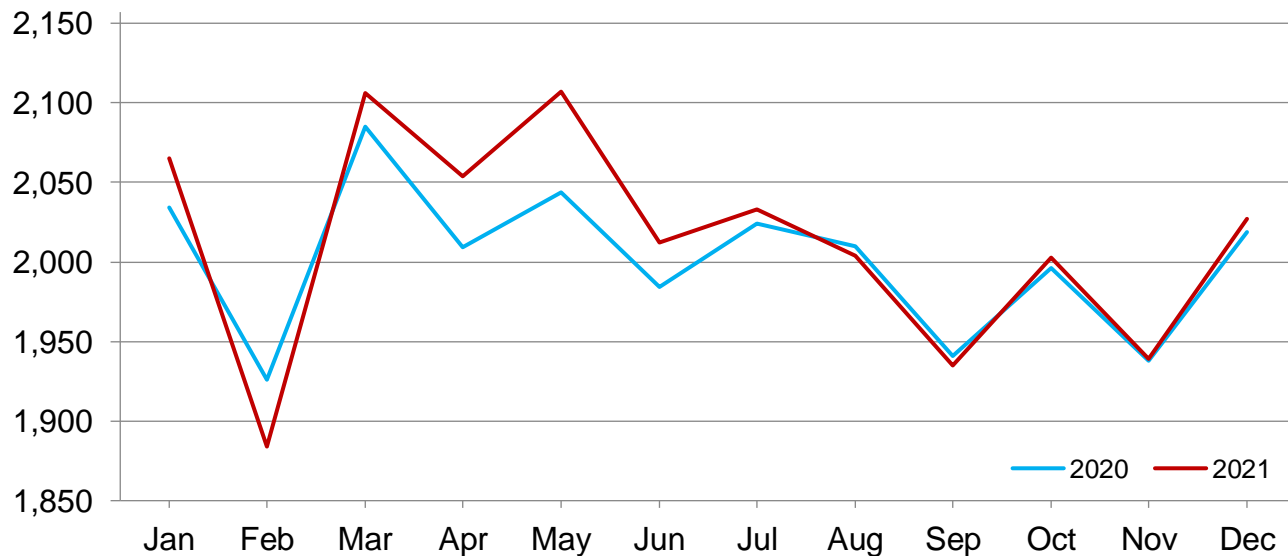
- Represents zero.

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Monthly Milk Per Cow - 24 Selected States

Pounds



Milk Cows and Production – States and United States: Revised July - September 2020 and 2021

[May not add due to rounding]

State	July - September milk cows ¹		July - September milk production ²		
	2020	2021	2020	2021	Change from 2020
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama	3.2	2.5	9.0	8.0	-11.1
Alaska	(D)	(D)	(D)	(D)	(NA)
Arizona	200.0	198.0	1,126.0	1,106.0	-1.8
Arkansas	5.0	4.5	14.0	13.0	-7.1
California	1,721.0	1,720.0	10,118.0	10,098.0	-0.2
Colorado	199.0	201.0	1,313.0	1,321.0	0.6
Connecticut	19.0	19.0	106.0	105.0	-0.9
Delaware	3.8	3.0	16.4	12.1	-26.2
Florida	111.0	107.0	519.0	493.0	-5.0
Georgia	80.0	82.0	410.0	425.0	3.7
Hawaii	(D)	(D)	(D)	(D)	(NA)
Idaho	645.0	652.0	4,176.0	4,193.0	0.4
Illinois	83.0	82.0	426.0	423.0	-0.7
Indiana	189.0	193.0	1,109.0	1,119.0	0.9
Iowa	218.0	226.0	1,335.0	1,381.0	3.4
Kansas	170.0	171.0	1,002.0	1,008.0	0.6
Kentucky	47.0	45.0	215.0	212.0	-1.4
Louisiana	9.5	9.0	27.0	25.0	-7.4
Maine	27.0	26.0	147.0	141.0	-4.1
Maryland	42.0	42.0	209.0	208.0	-0.5
Massachusetts	10.0	9.5	49.0	48.0	-2.0
Michigan	429.0	443.0	2,937.0	3,010.0	2.5
Minnesota	447.0	461.0	2,575.0	2,655.0	3.1
Mississippi	8.5	7.0	28.0	22.0	-21.4
Missouri	75.0	70.0	253.0	237.0	-6.3
Montana	11.5	11.0	64.0	61.0	-4.7
Nebraska	59.0	58.0	360.0	351.0	-2.5
Nevada	31.0	33.0	195.0	207.0	6.2
New Hampshire	11.0	10.5	57.0	56.0	-1.8
New Jersey	4.7	4.2	24.0	21.0	-12.5
New Mexico	326.0	311.0	1,989.0	1,829.0	-8.0
New York	626.0	629.0	3,838.0	3,898.0	1.6
North Carolina	40.0	39.0	210.0	217.0	3.3
North Dakota	15.0	15.0	84.0	85.0	1.2
Ohio	254.0	257.0	1,404.0	1,410.0	0.4
Oklahoma	41.0	38.0	165.0	157.0	-4.8
Oregon	124.0	125.0	658.0	658.0	-
Pennsylvania	482.0	475.0	2,521.0	2,482.0	-1.5
Rhode Island	0.5	0.5	2.8	2.5	-10.7
South Carolina	10.0	9.0	40.0	35.0	-12.5
South Dakota	138.0	160.0	803.0	939.0	16.9
Tennessee	29.0	28.0	126.0	119.0	-5.6
Texas	594.0	625.0	3,662.0	3,816.0	4.2
Utah	95.0	96.0	557.0	570.0	2.3
Vermont	121.0	120.0	638.0	639.0	0.2
Virginia	74.0	72.0	361.0	351.0	-2.8
Washington	279.0	268.0	1,732.0	1,613.0	-6.9
West Virginia	6.0	5.0	22.0	18.0	-18.2
Wisconsin	1,257.0	1,278.0	7,735.0	8,020.0	3.7
Wyoming	8.0	8.5	50.5	56.4	11.7
Other States ³	0.8	0.9	0.9	1.3	44.4
United States	9,380.0	9,450.0	55,419.0	55,875.0	0.8

- Represents zero.

(D) Withheld to avoid disclosing data for individual operations.

(NA) Not available.

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

³ Other States includes Alaska and Hawaii.

Milk Cows and Production – States and United States: Preliminary October - December 2020 and 2021

[May not add due to rounding]

State	October - December milk cows ¹		October - December milk production ²		
	2020	2021	2020	2021	Change from 2020
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama	3.0	3.0	10.0	8.0	-20.0
Alaska	(D)	(D)	(D)	(D)	(NA)
Arizona	198.0	194.0	1,208.0	1,172.0	-3.0
Arkansas	5.0	4.5	14.0	13.0	-7.1
California	1,720.0	1,719.0	10,157.0	10,325.0	1.7
Colorado	201.0	201.0	1,306.0	1,304.0	-0.2
Connecticut	19.0	18.5	108.0	104.0	-3.7
Delaware	3.7	2.8	16.4	11.4	-30.5
Florida	111.0	105.0	537.0	512.0	-4.7
Georgia	81.0	82.0	437.0	449.0	2.7
Hawaii	(D)	(D)	(D)	(D)	(NA)
Idaho	646.0	651.0	3,978.0	4,018.0	1.0
Illinois	84.0	81.0	446.0	429.0	-3.8
Indiana	191.0	186.0	1,118.0	1,089.0	-2.6
Iowa	219.0	225.0	1,352.0	1,379.0	2.0
Kansas	172.0	168.0	1,025.0	1,000.0	-2.4
Kentucky	47.0	45.0	219.0	214.0	-2.3
Louisiana	10.0	9.0	31.0	27.0	-12.9
Maine	27.0	26.0	143.0	138.0	-3.5
Maryland	43.0	41.0	221.0	206.0	-6.8
Massachusetts	10.0	9.5	48.0	47.0	-2.1
Michigan	435.0	434.0	2,925.0	2,908.0	-0.6
Minnesota	454.0	461.0	2,569.0	2,613.0	1.7
Mississippi	8.0	7.0	30.0	23.0	-23.3
Missouri	75.0	69.0	256.0	230.0	-10.2
Montana	11.0	11.0	62.0	59.0	-4.8
Nebraska	60.0	58.0	369.0	352.0	-4.6
Nevada	31.0	32.0	185.0	196.0	5.9
New Hampshire	11.0	10.5	56.0	54.0	-3.6
New Jersey	4.6	4.2	24.0	21.0	-12.5
New Mexico	334.0	295.0	2,060.0	1,782.0	-13.5
New York	626.0	624.0	3,813.0	3,799.0	-0.4
North Carolina	40.0	39.0	217.0	222.0	2.3
North Dakota	15.0	15.0	82.0	83.0	1.2
Ohio	257.0	250.0	1,411.0	1,361.0	-3.5
Oklahoma	41.0	39.0	174.0	175.0	0.6
Oregon	125.0	125.0	644.0	647.0	0.5
Pennsylvania	481.0	472.0	2,533.0	2,452.0	-3.2
Rhode Island	0.5	0.5	2.7	2.4	-11.1
South Carolina	10.0	9.0	42.0	38.0	-9.5
South Dakota	140.0	166.0	812.0	964.0	18.7
Tennessee	29.0	27.0	129.0	118.0	-8.5
Texas	608.0	625.0	3,800.0	3,929.0	3.4
Utah	95.0	94.0	548.0	539.0	-1.6
Vermont	120.0	120.0	636.0	629.0	-1.1
Virginia	74.0	71.0	372.0	362.0	-2.7
Washington	279.0	262.0	1,665.0	1,550.0	-6.9
West Virginia	6.0	5.0	21.0	19.0	-9.5
Wisconsin	1,259.0	1,277.0	7,692.0	7,854.0	2.1
Wyoming	8.0	9.0	51.8	56.2	8.5
Other States ³	0.8	0.9	1.3	1.2	-7.7
United States	9,429.0	9,383.0	55,557.0	55,484.0	-0.1

(D) Withheld to avoid disclosing data for individual operations.

(NA) Not available.

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

³ Other States includes Alaska and Hawaii.

Statistical Methodology

Survey Procedures: Primary data used to determine these estimates were obtained from a sample of producers. Individual States maintain a list of all known milk producers and information on the size of their herd. States use all known sources of producers to ensure that their lists are as complete as possible. Generally, all large producers and a sample of small producers are included in the survey. Questionnaires are mailed to producers near the end of the month to obtain data for the first day of the month. Additional reports are obtained by telephone, as needed, to supplement the mail response. Where feasible, States utilize state and federal administrative data to estimate milk production. This eliminates duplication of data gathering by different government agencies. Indications of milk cow inventory are also obtained in the January Cattle Surveys.

Estimation Procedures: Regional Field Offices prepare these estimates by using a combination of survey indications, historic trends, and any available administrative data. Individual State estimates are reviewed by the Agricultural Statistics Board for reasonableness.

Revision Policy: Milk production, milk per cow, and number of milk cows are subject to revision the following month after initial publication for monthly States or the following quarter for the quarterly States. Normally, administrative data from Federal Market Orders, State Departments of Agriculture, or other sources are the main basis for revisions. However, administrative data for all States may not be available in time for these revisions. Estimates are again subject to revisions in February each year based on additional administrative data. In the event that additional changes are necessary, a third revision is possible in February the following year. Estimates are again reviewed after data from the five-year Census of Agriculture are available. No revisions are made after that date.

Reliability: Since all operations with dairy animals are not included in the sample, survey estimates are subject to sampling variability. Survey results are also subject to non-sampling errors such as omissions, duplications, and mistakes in reporting, recording, and processing the data. The effects of these errors cannot be measured directly. They are minimized through rigid quality controls in the data collection process and through a careful review of all reported data for consistency and reasonableness.

To assist users in evaluating the reliability of the estimates in this report, the "Root Mean Square Error" is shown for selected items on the next page. The "Root Mean Square Error" is a statistical measure based on past performance and is computed using the differences between first and final estimates. The "Root Mean Square Error" for milk production estimates over the past 20 quarters is 0.1 percent. This means that chances are 2 out of 3 that the final estimate will not be above or below the current estimate of 55.5 billion pounds by more than 0.1 percent. Chances are 9 out of 10 that the difference will not exceed 0.3 percent.

Reliability of Quarterly Milk Production Estimates

[Based on data for the past 20 quarters]

Item	Root mean square error	90 percent confidence level	Difference between first and latest estimate				
			Average	Smallest	Largest	Quarters	
						Below latest	Above latest
	(percent)	(percent)	(1,000)	(1,000)	(1,000)	(number)	(number)
Milk production	0.1	0.3	58	1	215	14	6
All milk cows	0.1	0.2	9	0	26	16	3

Information Contacts

Listed below are the commodity specialists in the Livestock Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to nass@usda.gov.

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Suzanne Richards – Dairy Products	(202) 720-4448

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